



STEM Careers

Solar Energy Systems Engineer

Job Description: Work to improve the energy efficiency of residential, commercial, and industrial buildings using solar energy systems.

What do Solar Energy Systems Engineers do?

- Create plans for solar energy system development, monitoring, and evaluation activities.
- Design a solar hot-water heater for a home to help decrease energy bills.
- Perform computer simulations of solar photovoltaic generation system performance or energy production to optimize efficiency.
- Help farmer's become energy independent by designing a solar photovoltaic system that will fit on a barn roof.
- Perform thermal, stress, or cost reduction analyses for solar systems.
- Oversee the installation of a home solar energy system to make sure it is all done properly.
- Draw up blueprints of a solar photovoltaic system to be installed on the sides of a new skyscraper.

Your Interests:

- Are you good at math?
- Do you like to solve problems?
- Are you interested in how things work?
- Do you like to take things apart and put them back together?

Outlook:

Average Salary - \$43.06 hourly, \$89,560 annual

Projected Job Openings – 50,200 over the next 10 years

Education/Program of Study:

- Bachelor's Degree in an engineering discipline such as electrical or mechanical engineering
- Some positions may require a graduate degree in engineering
- Most employers seek to hire engineers who have a PE (professional engineer) license

Sources:

O*NET Online

http://quest.arc.nasa.gov/people/cfs/generic/aerospace_engineer_107.pdf

http://www.sciencebuddies.org/science-fair-projects/science-engineering-careers/Energy_solarenergysystemsengineer_c001.shtml?From=testb#natureofwork